



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,717	11/11/2003	Claus Harder	117163-00095	7255

21324 7590 10/31/2006

HAHN LOESER & PARKS, LLP
One GOJO Plaza
Suite 300
AKRON, OH 44311-1076

EXAMINER

TYSON, MELANIE RUANO

ART UNIT	PAPER NUMBER
----------	--------------

3731

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,717

Applicant(s)

HARDER ET AL.

Examiner

Melanie Tyson

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/706717, filed on 11 November 2003.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 20 in Figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract

Art Unit: 3731

on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains legal phraseology (comprising, line 1). Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-4, 6-7, 13, 21-23, 25-27, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer-Lindenberg et al. (Publication No. US 2004/0241036 A1). Meyer-Lindenberg et al. disclose an extruded carrier structure (paragraph 38) comprising metallic material (paragraphs 2 and 10-14). Meyer-Lindenberg et al. further

Art Unit: 3731

disclose the metallic material comprises a magnesium alloy (magnesium, yttrium, rare earths such as neodymium, and balance such as lithium; paragraphs 9-14), wherein the ranges of the components of the composition disclosed encompass the ranges claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the ranges claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involve only routine skill in the art.

7. Claims 1, 8-12, 14-17, 19-20, and 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (Patent No. 6,979,347 B1) in view of Meyer-Lindenberg et al. Wu et al. disclose a stent (Figure 2; column 3, lines 26-29, column 3, lines 44-51) for use in any biological or physiological lumen (column 3, lines 56-65) formed by a plurality of legs (22) and connecting elements (24) fabricated from a metallic material or alloy such as magnesium (column 4, lines 30-34). Wu et al. further disclose a stent that carries an active substance (column 2, lines 1-6) and that it is well known in the art to coat metallic stents with polymeric material impregnated with therapeutic substances (column 1, lines 39-43). The legs (22) have the same suitable width (W1) and the same suitable thickness (T; column 4, lines 16-29). Since the grooves formed on the plurality of legs (22) preferably have depths less than 50% of the thickness (T) of the plurality of legs (22; column 5, lines 9-10), the ratio of largest to smallest cross-sectional area and diameter of the plurality of legs is smaller than 2.

Wu et al. does not disclose the composition claimed. Meyer-Lindenberg et al. teach a carrier structure (paragraph 38) comprising metallic material (paragraphs 2 and

Art Unit: 3731

10-14). Meyer-Lindenberg et al. further disclose the metallic material comprises a magnesium alloy (magnesium, yttrium, rare earths such as neodymium, and balance such as lithium; paragraphs 9-14), wherein the ranges of the components of the composition disclosed encompass the ranges claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the ranges claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involve only routine skill in the art. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the device of Wu et al. from the magnesium alloy taught by Meyer-Lindenberg et al. in order to provide a device with good corrosion protection, increased ductility, and increased strength (paragraphs 7-8).

Claim 12 is being treated as a product by process limitation, in that "cutting a tube from one piece" refers to the process of making the carrier structure and not to the final product created. As set forth in MPEP 2113, "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product in the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Examiner has evaluated the product claims without giving much weight to the method of its manufacture. Therefore, in this case, a carrier structure produced by cutting a tube from one piece is directed to the method of making the carrier structure

Art Unit: 3731

and not to the final product made. It appears that the product disclosed by Wu et al. in view of Meyer-Lindenberg et al. would be the same or similar as that claimed; especially since both applicant's product and the prior art product have the same final structure of a tubular structure comprising a metallic material.

8. Claims 5, 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer-Lindenberg et al. in view of Bronfin et al. (Publication No. US 2003/0129074 A1). Meyer-Lindenberg et al. disclose an extruded carrier structure as described above, however, do not disclose the magnesium alloy comprises zirconium. Bronfin et al. teach utilizing 0 to 1% zirconium in magnesium-based alloys, since zirconium exhibits a potent grain refining effect on magnesium. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize zirconium in the structure disclosed by Meyer-Lindenberg et al. as taught by Bronfin et al. in order to provide the alloy with improved mechanical properties (paragraph 5).

9. Claims 18 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. in view of Meyer-Lindenberg et al., as applied to the claims above, and further in view of Richter (Patent No. 6,676,697 B1).

Wu et al. in view of Meyer-Lindenberg et al. disclose a device as described above, where the plurality of legs (22) form rings that are connected via connecting legs (24; column 3, line 66 - column 4, line 4). However, Wu et al. in view of Meyer-Lindenberg et al. do not disclose the connecting legs are of a smaller cross-sectional area than the plurality of legs. Richter discloses a stent having a plurality of members and connectors (Figure 1). Richter teaches that reducing the width of the connectors

Art Unit: 3731

provides the device with greater flexibility (column 6, line 44 – column 7, line 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the connecting legs of the device of Wu et al. in view of Meyer-Lindenberg et al. with a smaller cross-sectional area than the legs as taught by Richter in order to provide the device with greater flexibility, which in turn allows the device to accommodate the curvature of vessels.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Tyson whose telephone number is (571) 272-9062. The examiner can normally be reached on Monday through Thursday 9:00 a.m. - 6:30 p.m., alternate Fridays 9:00 a.m. - 5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Application/Control Number: 10/706,717

Page 8

Art Unit: 3731

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie Tyson *MT*
October 20, 2006

[Signature]
ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER
10/20/06.